NASA Invention

Magnets have long fascinated people of all ages. A magical material which surprisingly can summon a nail within its presence. However there is science behind it. You likely know that all magnets have two ends north and south, and that magnets attract things made of steel or iron or other ferrous materials. Also you probably know the basic law of all magnets: that opposites attract and likes repel. So, if you have two bar magnets with their ends marked "north" and "south," the north end of one magnet will attract the south end of the other. So therefore the south end of one will repel the south end of the other and same goes for north. That's where electromagnets come in. An electromagnet is the same way, except it is "temporary" -- the magnetic field only exists when electric current is flowing through it. An electromagnet starts with some sort of power source and conductor preferably a wire. What a battery produces is electrons. If you look at a battery, you can see that there are two ends, one marked plus and the other with a marked minus. Electrons collect at the negative or minus end of the battery, and, if you allow they will surge to the positive end. The way you allow them flow is with a wire or some means of a conductor. If you attach a wire directly between the positive and negative terminals of a battery electrons will flow from the negative side of the battery to the positive side as fast as they can. This creates a small magnetic field in the wire. It is this small magnetic field that is the basis of an electromagnet. This electromagnet power is used in Maglev trains and in my device which may help astronauts sustain in space for longer amounts of time.

I have visualized a track in which a projectile can be launched using electromagnetism. This track will have magnets on two sides in which the projectile is sandwiched in between. Once the projectile is loaded the magnets will be polarized and depolarized within fractions of a second of each other and thus will propel the projectile which has an opposite polarized shell or casing out of the track into space.

My device will be more financially and environmentally efficient. This is because instead of delivering supplies (astronauts wouldn't be able to survive the ride within the track due to many thousands of G's) and provisions using current rocket fuel which is expensive due to the excessive amount and environmentally hazardous due to carbon emissions.

My plan I think has harnessed the incredible power of magnetism to create an environmentally sound and financially efficient device to help provide supplies and provisions for astronauts in space.